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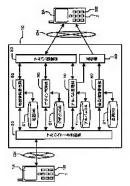
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(54) INFORMATION MANAGING SYSTEM

(57) Abstract:

PROBLEM TO BE SOLVED: To manage information by easily making and registering album data with a character and an image associated with map information by a terminal such as a cellular phone.

SOLUTION: A user registering the album data makes access to an album service server 10 via the information terminal such as the cellular phone with a photographing function. The user retrieves the map information on his own location, and transmits a comment and a photograph made to correspond to the map information to the service server 10. Information on a map, the character, and the image is associated with each other to become the album data, and is registered in an album database 71. By registering the album data, e-mail of guidance notice is transmitted to a preset prescribed member.



MACHINE TRANSLATION OF JP2003-233555

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[Detailed Description of the Invention]

[0001]

[The technical field to which an invention belongs] This invention matches and manages map information and information other than map information, and relates to the information management system with which the user who has predetermined authority can be provided. [0002]

[Description of the Prior Art]For example, the map information server which inputted the address made into the destination, the name of the nearby station, etc., and was installed on the Internet is searched, and the map information providing service on which it was made to display a desired map image is known conventionally. The user can make it able to wait each other, can search the map image of a place or the destination, and can check in the pictures.

[0003]For example, as indicated by JP,11-259390,A, JP,2001-188734,A, etc., The map image obtained by search can be attached to an E-mail, or the information (URL:Uniform Resource Locator) which specifies the whereabouts of the map image in a map information database can be made to be able to link in the text of an E-mail, and other users can also be contacted. [0004]

[Problem(s) to be Solved by the Invention]When transmitting text and picture information other than a map image and a map image to the other party's terminal in conventional technology, it must attach to an E-mail as an attached file, or link information must be described in the text, and it is user-unfriendly.

[0005]On the other hand, the information processing ability of a cellular phone improves and multi-functionalization is progressing. The cellular phone in recent years has spread besides conversation with the conventional sound, or a data communication facility as a Personal Digital Assistant which it had to the image pick-up function. However, in the conventional map information providing service, it only provides as mentioned above as information on throwing away of the map image attached to an E-mail, and the function of the cellular phone and the Personal Digital Assistant in which advanced features progressed is not utilized.

[0006] The user can connect the occurrence of the day, etc. to a friend, an acquaintance, etc. at any time by attaching the map image which came to hand from the picture picturized with the cellular phone, or map information service to an E-mail, and transmitting. Thereby, varieties of information, such as recollections of a destination, are sharable in the group (community) to which a user belongs. However, information is sharable only among the addressees of an E-mail. Therefore, in order to share the information on a new friend, an acquaintance, etc., and the past, transmission etc. need to carry out [new friends] the E-mail transmitted in the past, and it takes time and effort. Only the information saved in its own terminal with the natural thing can be perused, and when required, in the case of an E-mail, can take out required information, and it cannot peruse it.

[0007]But the website for information exchange is provided, and if various kinds of information is saved and released on this website, even when changing a friend and an acquaintance, information can be shared within a group. However, creating a web page and uploading to a website requires time and effort, and it is user-unfriendly.

[0008]It was made in view of the problem mentioned above, the purpose can associate and save map information and other information, and there is this invention in providing the information management system which can be perused later. Other purposes of this invention are to provide the information management system which can share between two or more users the information included map information. The further purpose of this invention will become clear from the embodiment mentioned later.

[00091

[Means for Solving the Problem]An information management system concerning this invention is provided with an information registration device and an information providing device that an aforementioned problem should be solved. An information registration device matches map information and information other than map information, generates information for an inspection, and registers it into a predetermined storage area. An information providing device provides a predetermined user with information for an inspection registered into a storage area. [0010]According to a suitable embodiment, it has a map information providing device further. A map information providing device provides map information of a prescribed range according to retrieval required.

[0011]The user can peruse information for an inspection, for example via variety-of-information terminals with a data communication facility (a television receiver, a game machine, a cellular phone, a Personal Digital Assistant, a personal computer, a fixed-line telephone, a facsimile machine, etc.). It can also transmit to a user's information terminal directly, and also information for an inspection can also be transmitted to other servers.

[0012]Bidirectional data communications are connected to an information terminal, a map information providing device, an information registration device, and an information providing device possible via a communication network, respectively. A map information providing device, an information registration device, and an information providing device can also be formed in the same computer (server), and can also be realized on a computer different, respectively.

[0013]Here, with "map information", also when a case where it distributes to an information terminal is included via a communication network when map data of a required range is required, and also an information terminal reads and uses map data currently recorded on recording media, such as CD-ROM and a memory, from a map server, it contains. That is, in the case of the latter, an information terminal reads and uses map data from a recording medium connected to an information terminal. Although various expressive form, such as a top view, a bird's-eye view, a bird's-eye view, and pictorial drawing, is shown in map information, when a bird's-eye view, pictorial drawing, etc. are provided as map information, it is preferred that it is [user] selectable in expressive form of a map. And it is preferred that a contraction scale of a map is also set up

hand control or automatically.

[0014]It comes to match information other than map information and map information, and "the information for an inspection" can generate information for an inspection actually provided to various timing. When correspondence relation between map information, the other information, and both is independently registered into an information registration device, respectively and a reading request occurs from an information terminal, one method reads information other than map information and map information, generates a screen for an inspection, and provides an information terminal with it. When registering information other than map information and map information registration device, other one method generates beforehand a screen for an inspection (final information for an inspection), and registers it.

[0015]A map information providing device has a database which hierarchizes a map file of a large number from which a mesh size differs, for example, and provides map information of a prescribed range according to retrieval required. For example, when a user inputs a desired address, a telephone number, etc. of a place via an information terminal, a map of a prescribed range having included an address applicable to the address and telephone number is searched and provided.

[0016]Or the map information providing device can also search and provide map information of a prescribed range by receiving a user's present position information. As a user's present position information, an address of a nearby base station in case a user carries a mobile information terminal, and position data in the case of an information terminal with built-in GPS (Global Positioning System) can be mentioned, for example. The ranges of a map which a map information providing device provides (contraction scale etc.) can be suitably changed by a user's operation.

[0017]An information registration device matches information and map information which a user inputted via an information terminal, generates information for an inspection, and makes a predetermined storage area memorize this information for an inspection. Information which a user inputs is information other than map information, for example, can mention text, picture information, speech information, and music information.

[0018]In mass storage devices, such as HDD, a storage area (directory) for exclusive use is set up for every [every user or] group, respectively, and one or more information for an inspection is memorized in this storage area for exclusive use. Information for an inspection can be created in a language like HTML or XML, for example.

[0019] And since an information providing device provides information for an inspection to an accessed information terminal, thereby, users can peruse registered information for an inspection easily. An information providing device can be constituted as a WWW server, for example. [0020] According to a suitable embodiment of this invention, it has a reporting means further. A reporting means transmits a notice of guidance to a predetermined user set up beforehand, when information for an inspection is registered into a storage area by an information registration device.

[0021] That is, an inspection is urged by notifying a predetermined person of information for an

inspection having been registered into a storage area, and an inspection of it having been attained. A notice of guidance is typically performed by E-mail. In an E-mail of a notice of guidance, information for specifying information for an inspection, including for example, URL of information for an inspection, etc., is indicated.

[0022]According to a suitable embodiment of this invention, access control information which shows a level of inspection authority is further matched with information for an inspection. And an information providing device provides information for an inspection with reference to access control information according to an inspection authority level.

[0023]Access control information controls access to information for an inspection, and a level of inspection authority is set up. Information for an inspection that an information providing device is set as a level with an "improper" inspection, for example cannot be released to the exterior, but only a maker of the information can be made to peruse it.

[0024]An inspection authority level can also be set to access control information about each of each information which constitutes information for an inspection. And the information providing device can also provide all or a part of information for an inspection with reference to access control information according to each inspection authority level.

[0025]For example, although map information is opened to all the members, text and the picture information can set up an inspection authority level for every classification of information like opening only to a predetermined member. Although a part of text (for example, name etc.) is released, the remainder (an address, office, etc.) can also set up an inspection authority level for every item also for information on an identical kind like using disclosure.

[0026]The reporting means can transmit a notice of guidance with reference to access control information according to an inspection authority level.

[0027]For example, in setting out opened to all the members registered beforehand, a notice of guidance is transmitted to all the members, and, in setting out opened only to some members, a notice of guidance is transmitted only to some of the members.

[0028]It can be distinguished by an e-mail address or certification information (ID, a login name, a password, etc.), for example whether a user has predetermined authority.

[0029]According to a suitable embodiment of this invention, layout information which shows a layout at the time of an inspection is further matched with information for an inspection. And an information providing device provides information for an inspection with a predetermined layout by referring to layout information.

[0030]In a predetermined layout, it is selectable according to inspection capability of an information terminal used in order that a user may peruse information for an inspection. [0031]As inspection capability of an information terminal, existence of plug-in software for playing screen size, resolution, music, etc., etc. can be mentioned, for example. In the case of a Personal Digital Assistant with small screen size, information for an inspection is hierarchized, and it chooses a layout to which it can view and listen on a small screen. On the contrary, when using a personal computer with big screen size for an information terminal, a layout to which it can view and listen at once is chosen. For example, in the case of an information terminal

deficient in colored presentation capability, it is also possible to decrease the color of and provide a picture in information for an inspection.

[0032]A predetermined layout may assign and display a link to inputted information on a position of map information of a prescribed range.

[0033]By assigning and displaying a link to a character or other pictures on a map image, correspondence being related with map information becomes clear, and user-friendliness improves.

[0034]If other viewpoints of this invention are followed, an information registration device constitutes information for an inspection from two or more users in a predetermined storage area so that registration is possible respectively.

[0035]Two or more users can share one or more storage areas, and all participants can also share information for an inspection from each user.

[0036]When information other than map information is picture information, information on a camera station can also be included in picture information.

[0037]Thereby, a building, and a position and a camera station of a photographic subject of Hitoshi Yamakawa can be simultaneously shown in map information, for example.

[0038]If other viewpoints of this invention are followed, map information and information other than map information corresponding in time, it is related and information for an inspection is constituted.

[0039]For example, if a time-axis is added to map information and a map data base for every time series is used, the past map information, and newest text and picture information can be matched, and information for an inspection can be generated. By this, a user goes to a place of recollections, such as a hometown, generates text, speech information, picture information that copied the present situation, etc., can match information on these newest, and map information of the past concerning recollections, and can generate information for an inspection, for example. [0040]This invention can also be further regarded as a computer program, this program is fixed

[00-07] first invention can also be future regarded as a computer program. this program is fixed to recording media, such as CD-ROM, HDD, and a memory, for example — it can also distribute by carrying out — it can carry out and can also distribute via a communication network.

[00-41]

[Embodiment of the Invention]An embodiment of the invention is described based on $\underline{\text{drawing 1}}$ - $\underline{\text{drawing 1}}$ **.

[0042]1. The 1st embodiment <u>drawing 1</u> - <u>drawing 9</u> start a 1st embodiment of this invention, and first, <u>drawing 1</u> is a composition explanatory view showing an outline, when [whole] the information management system concerning this embodiment is used for an album service system.

[0043] This system is provided with the following.

They are the information terminal 1 by the side of a sending person, and the information terminal 2 by the side of a visitor so that it may mention later, respectively.

Album service server (it may be hereafter written as a "service server") 10.

In the following explanation, those (visitor) who call a user those who generate and register

album data (sending person), and peruse the registered album data are called a member, and are distinguished for convenience.

[0044]The information terminals 1 and 2 are constituted as a cellular phone, for example. Although this invention is suitably used for Personal Digital Assistants, such as a cellular phone, other terminals, such as a personal computer of not only this but a desktop type or a note type and a digital camera, can also be used. The information terminals 1 and 2 are provided with the indicators 1A and 2A, and the final controlling element 1B and 2B, and via the communication networks CN, such as the Internet and a wireless communication network, are connected with the service server 10, respectively so that two-way communication is possible.

[0045]The service server 10 is provided with album data registering Section 20, the album Circulation Division 30, the informing part 40, the map information Management Department 50, the design Management Department 60, the album Management Department 70, and the member-information-management department 80.

[0046] According to the operation from the information terminal 1, album data registering Section 20 generates album data, and registers it into a predetermined storage area. As shown in drawing 2, album data registering Section 20 has two or more functions 21-27.

[0047]Here album data registering Section 20, For example, coordinated operation is carried out with a WWW server via means, such as CGI (Common GatewayInterface), and the information terminal 1 is constituted so that various kinds of inputs may be performed to album data registering Section 20 via a web browser.

[0048]When making a change of new membership registration and the contents of membership registration, a user inputs a given item. The membership registration inputting function 21 hands over the matter which the user inputted in the member-information-management department 80. The member-information-management department 80 makes the membership database (the inside of a figure "DB", and brief sketch) 81 update.

[0049]Next, the user can search map information, for example by inputting all or a part of the address of the destination, and zip code or telephone numbers into the map retrieval information inputting function 22 via the information terminal 1. When the information terminal 1 has a GPS function, the information on the longitude latitude detected by the GPS function can also be used as search information. The search information inputted into the map retrieval information inputting function 22 is handed over by the map information Management Department 50. The map information Management Department 50 searches the map data base 51 based on the inputted search information, detects the map information of a prescribed range, and returns to album data registering Section 20.

[0050]The map of other expressive form, such as a bird's-eye view, a bird's-eye view, and pictorial drawing, other than the usual top view can be made to store in the map data base 51 here. And for example, by initial setting, a top view is chosen automatically and a user can choose the map of other expressive form manually. For example, as shown in a top view and a bird's-eye view, two or more kinds of maps with which expressive form differs are associated, and it may enable it to register with album data. The contraction scale of a map can be set up

now hand control or automatically. The contraction scale of two or more kinds of maps is changed, and it may enable it to change each contraction scale hand control or automatically for example, like displaying a top view by a large scale and displaying a bird's-eye view by a small scale.

[0051]The user can input the text related with map information via the character input function 23. As text, a title and comments (explanation, comment, etc.) can be mentioned, for example, [0052]The user can relate a desired picture with map information via the image input function 24. For example, when the information terminal 1 is provided with the image pick-up function, the picture information picturized with the information terminal 1 can be uploaded to the service server 20 via the image input function 24. Or when the information terminal 1 is possible for recording media, such as a PC card and a memory, to data reading, the picture information currently recorded on the recording medium can also be uploaded to the service server 20. It is also possible to choose and use the picture information (for example, an icon, a background image, etc.) currently beforehand prepared in the service server 20.

[0053]The user can choose the layout of the album data which consists of map information, text, and picture information by using the design function preselection capability 25. For example, a desired layout can be chosen via the design Management Department 60 out of two or more layouts beforehand prepared in the design database 61, or the selected layout can also be customized. The layout to choose is not limited to one. For example, two kinds of layouts of the layout for personal computers with big screen size and the layout for Personal Digital Assistants with small screen size can also be chosen.

[0054]Or a selectable layout can be changed in the album used for the purpose of business, and a private album. In the case of the album for the purpose of business, available data size is enlarged, and it may enable it to specifically stick two or more pictures. The maximum of the album data which can be registered into one album is also changeable according to the purpose etc.

[0055]The user can perform specification of the member who permits the inspection of album data, and setting out of an inspection authority level via the distribution destination specification function 26. The user can permit the inspection of album data to all the members of two or more members or the unregistered third parties who were beforehand registered into the membership database 81, or some persons. For example, the level of inspection authority can be set up about the whole or some of album data like the ability "for a third party not to be perused of a picture". ["only a family can be perused", "only a friend being perused", "anyone being perused", "all families being perused", and] For example, the period which can be perused can also be set up like "three days can be perused" and "an inspection being possible for two weeks." This limited time offer can also be changed according to an inspection candidate's classification. Or it is also possible to specify the dispatch time of the notice of guidance a priori. For example, user-friendliness improves more by transmitting the notice of guidance to the specified time at a predetermined member.

[0056]A member's information and the information on an inspection authority level that the

inspection of album data is permitted are handed over by the member-information-management department 80. The member-information-management department 80 updates the contents of registration of the membership database 81.

[0057]If a user directs contribution (registration), the album data registration function 27 will associate album data, layout information, and the information on a distribution destination and an inspection authority level, and will hand them over to the album Management Department 70. The album Management Department 70 registers album data into the album database 71. Map retrieval information is registered as information or a mesh number of lat/long, etc. [0058]Drawing 3 is an explanatory view showing an example of the memory content of the membership database 81 and the album database 71.

[0059]As shown in drawing 3.(a), to the membership database 81. The identification information (ID) for identifying each member, and a member's name and address, An e-mail address (e-mail) and the certification information (password) for logging in to the service server 20 and using album service. The address of the album storage area currently assigned to each member, the inspection authority level (public presentation, exception of disclosure) of the whole album, the list of members who permit the inspection of an album, etc., etc. are matched and memorized. [0060]As shown in drawing 3.(b), the album database 71 manages each member's album, and manages, the contents, i.e., each album data, of each album. As shown in drawing 3.(b), in the album database 71 of a certain member's album. For every album data, the title of album data, and the storage location address of album data, Data size, the inspection authority level of album data, the registration date (contribution day) of album data, the perused number of times (reference frequency), the link information to the map information displayed into album data, the layout information of album data, etc. are matched.

[0061]Next, <u>drawing 4</u> is an explanatory view showing an example of the screen constitution which album data registering Section 20 provides.

[0062]The user who is the registration membership of album service accesses the service server 10, and if predetermined attestation is completed and its own album menu is reached, a screen like $\frac{drawing 4}{da}$ will be displayed on the indicator 1A of the information terminal 1. [0063]A list of album data is displayed on an album menu (G1). The check box for choosing data is provided in the one end side of the title name of each album data, respectively (G2), and the indicator of reference frequency is provided in the other end side, respectively (G3). The edit button G4 for shifting to the Edit menu of registered album data, the deletion button G5 for deleting album data, the contribution button G6 for registering new album data, and the cancel button G7 are formed in the album menu.

[0064]Drawing 4 (b) is a contribution screen for registering new album data. The position information display column G8 which displays position information, such as an address, a zip code or lat/long, on a contribution screen, The map display G9 as which the map information of the range according to position information is displayed, and the distribution destination selecting part G10 for setting up the distribution destination to which it shows the inspection of album data, an inspection authority level, etc., It has the comment input part G11 for inputting a

comment sentence, and the picture attachment part G12 for attaching a picture. [0065]If an example is explained in full detail about the distribution destination selecting part G10, the distribution destination selecting part G10 is what is called a pulldown type menu. For example, if the distribution destination selecting part G10 is operated, the name of the friend, acquaintance, or group registered beforehand will appear in list form. The user can choose one or more members or groups from this member or group (aggregate of one person or two or more members) by whom the list display was done as those who give inspection permission of album data.

[0066]If map information, a comment, and the input of an attached image are completed, a user will operate the contribution button G13 for becoming final and conclusive contribution. Thereby, new album data is added to a user's album. When canceling contribution, a user operates the cancel button G14.

[0067] <u>Drawing 5</u> is a flow chart which shows the outline of processing in the case of registering new album data into album service. A step is written as "S" among a figure.

[0068]First, a user operates the information terminal 1 and accesses the service server 10 via the communication network CN (S1). If the information terminal 1 accesses, the service server 10 will display a top menu and will ask for the input of certification information (S2). A user transmits predetermined certification information, such as member ID and a password, to the service server 10 from the information terminal 1 (S3). When attestation fails in the input mistake of a password, etc., error handling which asks for reinput of (S4:NO) and certification information, etc. is performed (S5).

[0069]When attestation is successful, a user generates new album data as follows, for example (S6-S11). First, a user inputs position information (S6) and makes the service server 10 search map information (S7). Next, a user inputs the character (comment) related with map information (S8). A user attaches the picture related with map information (S9). Thereby, the new album data which consists of map information, text, and picture information is generated. And a user sets up a member, an inspection authority level (public level), etc. which permit the inspection of album data (S10). The design at the time of an album data inspection (layout) is also chosen (S11). [0070]A generation order of album data is not limited above. For example, after choosing a

design first, map information, text, etc. may be inputted, and the user can choose or input data in order of a request. A comment, a picture, and the map can also include not only one but two or more pictures and map information in album data, respectively.

[0071]When generation of album data is completed, a user operates the contribution button G13 (S12:YES). Thereby, the service server 10 matches map information, text, picture information, a distribution destination, a public level, a layout, etc., and registers them into the album database 71 (S14). Thus, additional registration of the album data generated newly is carried out into a user's album. A user can create album data succeedingly until he wishes the end of album operation (S13:YES).

[0072] If registration to an album is performed, the service server 10 will send the notice of guidance by an E-mail to each member of the distribution destination specified by a user (S15).

"this E-mail — for example — Mr. **'s album had new contribution " "from a title name:parents' home" — etc. — it can constitute including a guide sentence [like] and URL to a user's album. [0073]The member who received such a notice of guidance peruses album data by inspection processing as shown in <u>drawing 6</u>.

[0074]The member who received the notice of guidance accesses the album of the service server 10 via (S21) and the information terminal 2 (S22). The service server 10 inspects the public level (inspection authority level set as the whole album) of the accessed album, and judges public presentation or limited public presentation (disclosure is also included) (S23). When the inspection of the album is restricted, the input of (S23:YES) and certification information is required of a user (S24). If certification information is inputted from the information terminal 2 (S25), it will be judged whether the service server 10 is a member who compares certification information and has inspection authority (S26). Error handling is performed when attestation is unsuccessful (S27).

[0075]When the member who has inspection authority accesses, (S26:YES) and a user's album menu are displayed (S28). A list of album data is displayed on this album menu so that it may mention later with drawing 7 and drawing 8.

[0076]A member chooses desired album data (S29). The service server 10 arranges map information, text, and picture information to a prescribed position with reference to layout information, and provides a member with album data (S30). A member can peruse other album data until he ends inspection operation (S31). After a member ends an inspection (S31:YES), the service server 10 updates the album database 71, in order to change the reference frequency of an album (S32).

[0077]Next, <u>drawing 7</u> and <u>drawing 8</u> show an example of the inspection screen of album data. <u>Drawing 7</u> is a suitable screen layout for a Personal Digital Assistant with small screen size, etc., and <u>drawing 8</u> is a suitable screen layout for a personal computer with big screen size, etc. [0078]First, <u>drawing 7</u> is referred to. <u>Drawing 7</u> (a) is a certain user's album menu screen. The title list of the album data registered is displayed on the album menu. The member can peruse the

[0079] <u>Drawing 7</u> (b) is an example of a display screen of the album data displayed when a certain title is chosen. The display screen is hierarchized in order to display album data at a terminal with small screen size of a Personal Digital Assistant etc. First, the title name of album data, the attached picture, and a comment are displayed on the first screen. A screen is scrolled and perused when there are many characters of a comment. All over the screen, the button G21 for moving to the map information which constitutes some album data is displayed.

album data of the selected title by choosing a desired title.

[0080]If a member operates the button G21, as shown in drawing T_c(c), it will move to a map screen. This map screen is provided with a map image from the map data base 51 via the map information Management Department 50. The map displayed is linked to the map data base 51 via the map information Management Department 50. Therefore, expansion of a map and reduction can be freely performed by operating the button G22 and G23. Although the graphic display has not been carried out, a map can be scrolled and it can also move to the portion

besides a display.

[0081]<u>Drawing 8</u> shows a layout when screen size is large. As shown in <u>drawing 8</u> (a), an album menu is generable by assigning the title of album data to the position on the map relevant to album data, and arranging it.

[0082]According to the contraction scale of a map, the method of presentation of a title is also changeable. For example, on the national figure of a small scale, an album title can be displayed on each position on a map as the number of registration of album data is displayed by local big block units, such as Kanto and Kansai, and a contraction scale is raised. In addition to an album title, the reduction image (thumbnail image) or icon of pictures (picture etc. which the user picturized) in album data may be displayed.

[0083]A member's selection of a desired title name will display the album data which consists of a comment, a picture, and more detailed map information, as shown in <u>drawing 8</u> (b). [0084]Since this embodiment is constituted as mentioned above, it can match easily the information and map information of the character inputted from the information terminal 1, or a picture, and can generate album data. And album data can be registered into the service server

10, and other members can be made to peruse.
[0085]Therefore, by accessing the service server 10 from a destination etc., the user who owns the cellular phone provided with a photographing function and network communication mechanism, for example can match the map of a visit place, and the comment of a travel, and

can register with the picture photoed while traveling etc. easily [its own album].

[0086]It can register with the album database 71 by the ability to make a travel record, a diary, etc. into digital contents easily by this, and management edit of the record of a self life can be carried out easily, and a friend etc. can also be made to peruse. Like before, it is easier than the case where a travel record etc. are distributed to a friend etc. with an E-mail with a picture. Members other than those to whom management preservation of the E-mail is only carried out within the mail server, and the E-mail was distributed in the electronic mail system are made to

do an inspection etc. afterwards, or edit of the contents is troublesome. However, in this embodiment, the information which matched the map, the character, and the picture can be registered easily, can be edited, and can be managed. [0087]Since the notice of guidance is automatically sent to the member registered from the

[0007]Since the notice of guidance is automatically sent to the member registered from the service server 10 when album data is registered, a user does not need to contact each member and can make it peruse to a member simply.

[0088]In order to perform access control like public presentation and disclosure (limited public presentation) of an album, the third party by whom fixed reliance is not established can be beforehand prevented from perusing an album among users, and user-friendliness improves it to it.

[0089]2. Describe a 2nd embodiment of this invention based on the 2nd embodiment next drawing 9, and drawing 10. In the following explanation, the same numerals shall be given to the same component as the component mentioned above, and the explanation shall be omitted. The feature of this embodiment is at the point of performing access control to each data (map

information, text, picture information) of every [which constitutes album data and album data]. [0090] Drawing 9 is a flow chart of the inspection processing by this embodiment. In this processing, access to an album is permitted (S26:YES), and when (S28) and a member choose album data after an album menu is displayed, authentication work is performed according to an inspection authority level (S41-S43). Processing of S41-S43 is applied also at the time of the inspection of each data in selected album data.

[0091]That is, apart from the access restriction of the album itself, the access restriction to each album data can be set up, respectively. As shown in <u>drawing 10</u> (a), the display of "**" etc. is added to the album data to which the user set restrictions on access, for example. The display which shows such restrictions on access may be omitted.

[0092]If a member chooses the album data set up in restrictions on access, as shown in <u>drawing 10 (b)</u>, only a comment will be displayed and the input of certification information (typically password) will be called for from the inspection of a picture and a map. A member's input of predetermined certification information will display other information (a map and a picture) that restrictions on access were set up, as shown in drawing 10 (c).

[0093]Thus, the user can set up restrictions on access for each [which constitutes an album] album data of every, and can set up restrictions on access further for each [which constitutes album data] data of every. Therefore, user-friendliness improves by warmer access control. [0094]3. The 3rd embodiment drawing11 is a flow chart which shows the registration processing of the album data concerning a 3rd embodiment of this invention.

[0095]When searching map information with this embodiment on the assumption that the information terminal provided with the GPS function, the feature is that it transmits GPS data to the service server 10 (S51).

[0096] It does not restrict, when the GPS function is beforehand built in in the information

terminal. ** which was an information terminal connectable with the GPS device, the radio, or the cable of a different body is good. When a base transceiver station is the mobile telecom terminal arranged comparatively like PHS (Personal Handy-phone System) for example, [many] Map information can also be searched by transmitting the information which identifies the radio base station which exists in communication area to the service server 10. [0097]4. The 4th embodiment drawing 12 is a key map of a 4th embodiment of this invention. The feature of this embodiment is at the point that two or more users share an album. [0098]Drawing 12 (a) is a menu screen of a share album. Two or more users can contribute

album data via each information terminal 1. Since the principal part of registration / inspection processing of album data is the same as that of said 1st embodiment, explanation is omitted. [0099]If a building, an icon, etc. which were displayed on the map are selected as shown in drawing 12 (b), the number of an album title, a contribution day, a contributor, and those that consent to the contents of contribution, etc. will be displayed in list form.

[0100]In this embodiment, in order to share an album by two or more users, it is different for the number of users, the employment history of an album, the purpose of an album, etc., for example, but the number of contribution increases more than an individual user's private album.

- Therefore, since visibility will fall if all album titles are displayed on a map, as shown in <u>drawing 12</u> (b), it has hierarchized. However, this invention is not limited to this. For example, the album title of the newest predetermined number can be displayed.
- [0101]According to this embodiment, since an album can be shared by a multiple user, it can be accumulated easily, and the community information of the area, a place of work, etc., etc. can be managed and distributed, for example.
- [0102]5. Describe a 5th embodiment of this invention with reference to the 5th embodiment drawing 13 and drawing 14. The feature of this embodiment is that also uses the past map data in addition to the newest map data, and it can generate album data.
- [0103]As shown in <u>drawing 13</u>, with an address, a telephone number, latitude longitude, etc., the user can search the map data of the range made into the purpose, and can use for album data. Here, the map data base 51 of this embodiment has a time-axis, and is provided with map data base [of a kind which is different in age in time [51 (1) (n).
- [0104]Therefore, a user desired geographical space to the space specific information (for example, latitude longitude, an address, etc.) for specifying in addition, by inputting the time specific information (for example, age specification by A.D. or the Japanese calendar, etc.) for specifying a desired stage. The man data of a different kind in time can be used.
- [0105]As shown in drawing 14, in the album database 71. The mesh number for specifying the map data of a prescribed range in the every place figure database of each age, Text other than the map data matched with map data, picture information, speech information, and other management information (a title, a storage location address, data size, a public level, a contribution day, the number of references, a layout, etc.) are matched (0.06/Theophy, size, a wear were act cally the present map data but the
- [0106]Thereby, since a user uses not only the present map data but the past map data and can generate album data, the flexibility of album creation increases and his user-friendliness improves.
- [0107]This embodiment has two or more map data bases managed according to "age, for example, It can also be expressed as the information management system which specifies the map information of the desiring range of a desired age, associates this specified map information and information other than map information, and generates the information for an inspection by a user's time [to input] specific information and space specific information."
- [0108]This invention is not limited to each above-mentioned embodiment. If it is a person skilled in the art, various modification can be performed like adding a new addition and change to the composition of an embodiment. For example, the information matched with map information is limited to neither a character nor a still picture. Other information, including video, music, etc., can be matched with map information, and album data can also be generated.
- [0109]By said each embodiment, when map information (search information on map data), text, and picture information were registered independently, respectively and the reading request from an information terminal occurred, described the case where the screen for an inspection was generated and provided, but. When this invention registers not only this but map information, text, and picture information, it can generate the screen for an inspection beforehand and can also

make it memorize.

[0110]

[Effect of the Invention] According to this invention, map information and information other than map information can be matched, and can be made to register and peruse, and it becomes possible to share information between predetermined terminals as explained in full detail above.

[Claim(s)]

[Claim 1]An information management system comprising:

An information registration device which matches map information and information other than this map information, generates information for an inspection, and is registered into a predetermined storage area.

An information providing device which provides a predetermined user with information for an inspection registered into said storage area via a communication network.

[Claim 2]The information management device according to claim 1 provided with a map information providing device which provides map information of a prescribed range according to retrieval required.

[Claim 3]An information management system given in either claim 1 having a reporting means which transmits a notice of guidance to said predetermined user when said information for an inspection is registered into said storage area by said information registration device, or claim 2. [Claim 4]The information management system according to claim 3 with which access control information which shows a level of inspection authority is matched with said information for an inspection, and said information providing device provides said information for an inspection with reference to said access control information according to said inspection authority level. [Claim 5]Said inspection authority level is set to said access control information about each of each information which constitutes information for an inspection, and said information providing device, The information management system according to claim 4 which provides said all or a part of information for an inspection with reference to said access control information according to said each inspection authority level.

[Claim 6]An information management system given in either claim 4 to which said reporting means transmits said notice of guidance with reference to said access control information according to said inspection authority level, or claim 5.

[Claim 7]The information management system according to any one of claims 3 to 6 which provides said information for an inspection with a predetermined layout when layout information which shows a layout at the time of an inspection is matched with said information for an inspection and said information providing device refers to said layout information.

[Claim 8] Said predetermined layout responds to inspection capability of an information terminal for said predetermined user to peruse said information for an inspection, and is the selectable information management system according to claim 7.

[Claim 9] The information management system according to claim 7 which said predetermined layout assigns a link to information inputted into a position of map information of said

prescribed range by user, and is displayed.

[Claim 10]The information management system according to any one of claims 2 to 6 which is what searches and provides map information of said prescribed range when said map information providing device receives said predetermined user's present position information.

[Claim 1] The information management system according to any one of claims 2 to 6 with which said information registration device is constituted by said predetermined storage area in information for an inspection from two or more users so that registration is possible respectively. [Claim 12] The information management system according to any one of claims 2 to 6 with

which said information for an inspection contains any at least one of text or picture information which a user other than said map information inputted, or speech information.

[Claim 13] The information management system according to claim 12 with which information on a camera station is also included in said picture information when information other than said map information is picture information.

[Claim 14] The information management system according to claim 12 which can be set [being hand control or that a contraction scale of said map information is automatic, and] up. [Claim 15] The information management system according to any one of claims 1 to 14 with which it is related and said information for an inspection is constituted said map information and information other than map information corresponding in time.

[Claim 16]A function which matches map information and information other than this map information, generates information for an inspection, and is made to register into a predetermined storage area, A program for realizing on a computer a function to make a user provide information for an inspection registered into said storage area, and a function to which a predetermined user set up beforehand is made to transmit a notice of guidance when said information for an inspection is registered into said storage area.

[Brief Description of the Drawings]

[Drawing 1]It is a block diagram showing the rough entire configuration of the album service system concerning a 1st embodiment of this invention.

[<u>Drawing 2</u>]It is a block diagram showing the functional composition of album data registering Section.

[Drawing 3]It is an explanatory view showing the contents of a membership database and the album database.

[Drawing 4]It is a screen explanatory view showing the contribution screen of an album menu and album data.

[Drawing 5] It is a flow chart which shows the registration processing of album data.

 $\underline{[Drawing\ 6]} It\ is\ a\ flow\ chart\ which\ shows\ inspection\ processing\ of\ album\ data.$

[Drawing 7]It is an explanatory view showing the inspection screen of an album.

[Drawing 8] It is an explanatory view showing other inspection screens.

[Drawing 9] It is a flow chart which shows inspection processing of the album data concerning a 2nd embodiment of this invention.

[Drawing 10] It is an explanatory view of the album inspection screen where access restriction

was set up.

[Drawing 11] It is a flow chart which shows the registration processing of the album data concerning a 3rd embodiment of this invention.

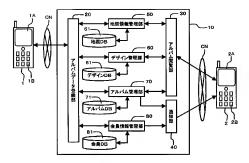
[Drawing 12] It is a key map of the album service system concerning a 4th embodiment of this invention.

[Drawing 13] It is a block diagram showing functionally the important section of the album data service concerning a 5th embodiment of this invention.

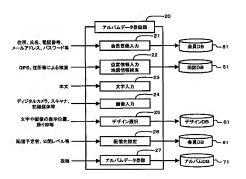
[Drawing 14] It is an explanatory view showing signs that match the map data and the text which were managed according to the age, picture information, etc., and album data is provided.

[Description of Notations]

- 1 Information terminal
- 2 Information terminal
- 10 Album service server
- 20 Album data registering Section
- 30 Album Circulation Division
- 40 Informing part
- 50 Map information Management Department
- 51 Map data base
- 60 Design Management Department
- 61 Design database
- 70 Album Management Department
- 71 Album database
- 80 Member-information-management department
- 81 Membership database



Drawing 1

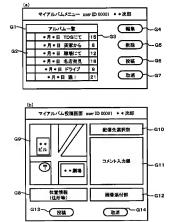


Drawing 2

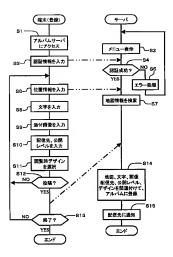
(a)													
	会員データベース												
会員ID	氏名	住所	e-mail	パスワード	アルベムアドレス	公開レベル	友人リスト						
00001	* * 次郎	東京都 * *	jirou@xyz	PW	http://www.zenrin/ user00001/	公開	友人 F1, F2						

(b)											
	アルバムデータベース										
タイトル	格納先 アドレス	データ サイズ	公開レベル	投稿日	参照数	地国情報 へのリンク	レイアウト				
*月*日 TDSにて	2001_*.html	30KB	友人のみ	2001/11/1	70	メッシュ 番号	標準				

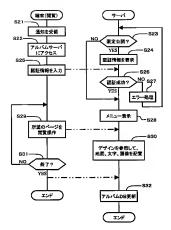
Drawing 3



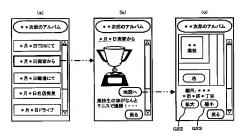
Drawing 4



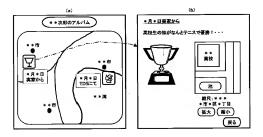
Drawing 5



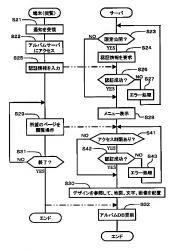
Drawing 6



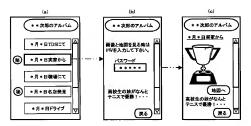
Drawing 7



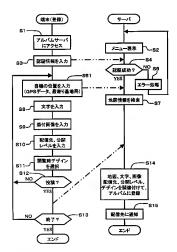
Drawing 8



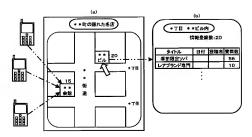
Drawing 9



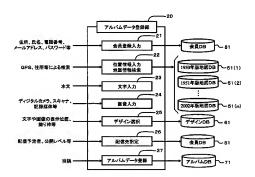
Drawing 10



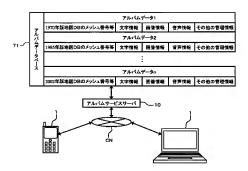
Drawing 11



Drawing 12



Drawing 13



Drawing 14